

### **Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

### **Claim Listing**

1. (Currently Amended) A computer-implemented method of processing a claim, the method comprising:

receiving information corresponding to a context free grammar expression of at least one provision governing claim adjudication;

receiving information corresponding to a claim;

calculating a score representing a confidence that the received information corresponding to the claim includes sufficient information to identify a provider and a member;

determining if the calculated score exceeds an auto-adjudication threshold, and if so:

automatically determining whether the at least one provision applies to the claim based on the received information corresponding to the context free grammar expression of the at least one provision and the received information corresponding to the claim; ~~determining whether the at least one provision applies to the claim.~~

2. (Original) The method of claim 1, wherein the context free grammar comprises a Backus-Naur format grammar.

3. (Original) The method of claim 1,  
wherein the context free grammar expression of the at least one provision includes expression of application criteria for the provision; and

wherein determining whether the at least one provision applies to the claim includes evaluating the expression using the received information corresponding to the claim.

4. (Original) The method of claim 1, further comprising automatically adjudicating the claim based on the at least one provision that applies to that claim.

5. (Original) The method of claim 4, wherein adjudicating comprises at least one of the following: determining an obligation owed to another party and determining an amount owed from another party.

6. (Original) The method of claim 4, further comprising logging identification of the provision determined to apply to the claim along with information corresponding to the adjudication.

7. (Original) The method of claim 6, further comprising generating a report by analyzing different adjudications of the provision.

8. (Original) The method of claim 1, wherein the received information corresponding to the context free grammar expression of the at least one provision comprises information determined by parsing the context free grammar expression.

9. (Original) The method of claim 1, wherein the received information corresponding to the context free grammar expression of the at least one provision includes information corresponding to a tree generated by parsing the context free grammar expression.

10. (Original) The method of claim 1, further comprising parsing the context free grammar expression.

11. (Original) The method of claim 10, further comprising generating a tree from the parsing of the context free grammar expression.

12. (Original) The method of claim 1, further comprising  
providing a graphical user interface for receiving user input identifying provision elements; and  
generating an expression of the provision in the context free grammar based on the received user input.

13. (Original) The method of claim 1, wherein receiving information corresponding to at least one provision comprises receiving information corresponding to more than one provision.

14. (Original) The method of claim 13, wherein determining whether the at least one provision applies to the claim comprises determining more than one provision applies.

15. (Original) The method of claim 13, wherein the more than one provisions comprise one or more provisions included in an agreement.

16. (Original) The method of claim 13, wherein the more than one provisions comprise provisions included in different agreements.

17. (Original) The method of claim 1, wherein the at least one provision comprises a provision included in a healthcare plan.

18. (Original) The method of claim 1, wherein the at least one provision comprises a provision included in a provider contract.

19. (Original) The method of claim 1, wherein the at least one provision comprises a provision corresponding to a policy regarding claim coverage.

20. (Original) The method of claim 1, wherein the at least one provision comprises a provision corresponding to a regulation.

21. (Original) The method of claim 1, wherein receiving information corresponding to a claim comprises receiving information over a network.

22. (Original) The method of claim 1, wherein the claim comprises a claim having at least one code corresponding to a healthcare service, procedure, or tangible article.

23. (Original) The method of claim 22, wherein the code comprises an AMA (American Medical Association) code.

24. (Original) The method of claim 1, further comprising extracting the information corresponding to the claim from information included on a health insurance claim form.

25. (Original) The method of claim 24, wherein the health insurance claim form comprises a HCFA form.

26. (Original) The method of claim 24, wherein the extracting comprises at least one of the following: extracting from a hardcopy of the form and extracting from an electronic data structure storing form data.

27. (Original) A computer-implemented method of processing a health insurance claim, the method comprising:

receiving information corresponding to a context free grammar expression of different provisions governing adjudication of the claim;

receiving information corresponding to a claim;

calculating a score representing a confidence that the received information corresponding to the claim includes sufficient information to identify a provider and a member;

determining if the calculated score exceeds an auto-adjudication threshold, and if so;

automatically determining whether the at least one provision applies to the claim based on the received information corresponding to a context free grammar expression of the different provisions and the received information corresponding to the claim;  
~~determining at least one of the provisions that applies to the claim.~~

28. (Original) The method of claim 27, wherein the context free grammar comprises a Backus-Naur format grammar.

29. (Original) The method of claim 28, further comprising adjudicating the claim based on the at least one of the provisions that applies to the claim.

30. (Original) The method of claim 29, wherein adjudicating the claim includes accessing a history of previously adjudicated claims.

31. (Original) The method of claim 30, wherein accessing a history of previously adjudicated claims includes accessing a history of previously adjudicated claims for a single healthcare plan member.

32. (Original) The method of claim 27, wherein the provisions comprise provisions included in a healthcare plan.

33. (Original) The method of claim 32, wherein the provisions comprise provisions excluding coverage.

34. (Original) The method of claim 32, wherein the provisions comprise provisions limiting coverage.

35. (Original) The method of claim 32, wherein the provisions comprise provisions governing coverage deductibles.

36. (Original) The method of claim 32, wherein the provisions comprise provisions expressing calculation of benefits.

37. (Original) The method of claim 36, wherein the provisions expressing calculation of benefits comprise provisions referring to a provider contract.

38. (Original) The method of claim 27, wherein the provisions comprise provisions in a benefit schedule.

39. (Original) The method of claim 38, wherein the benefit schedule comprises at least one of the following provisions: a provision excluding coverage, a provision limiting coverage, a provision indicating a coverage deductible, and a provision expressing calculation of benefits.

40. (Original) The method of claim 38, wherein the provisions comprise different benefit schedules.

41. (Original) The method of claim 40, wherein the different benefit schedules comprise at least one of the following: a default benefit schedule, an in-network benefit schedule, and out-of-network benefit schedule.

42. (Original) The method of claim 40, further comprising determining which, if any, of the different benefit schedules applies to the claim.

43. (Original) The method of claim 30, further comprising determining benefits owed to the healthcare plan member.

44. (Original) The method of claim 43, further comprising generating an explanation of benefits for the determined benefits.

45. (Original) The method of claim 32, wherein the provisions comprise provisions included in a provider contract describing reimbursement owed to a provider.

46. (Original) The method of claim 27, further comprising determining reimbursement owed to the provider for the claim.

47. (Original) The method of claim 46, further comprising generating an explanation of reimbursement for the determined reimbursement.

48. (Original) The method of claim 27, wherein the provisions comprise provisions corresponding to a healthcare company policy.

49. (Original) The method of claim 27, wherein the provisions comprise provisions corresponding to regulations.

50. (Original) The method of claim 27, wherein more than one of the provisions applies to the claim.

51. (Original) The method of claim 27, further comprising determining whether to review a claim by hand.

52. (Original) The method of claim 51, wherein determining comprises determining based on an estimation that a particular member can be correctly identified based on information corresponding to the claim.

53. (Original) The method of claim 52, wherein the estimation comprises an estimation based on a weighting of different member information included in the claim.

54. (Original) The method of claim 51, wherein determining comprises determining based on an estimation that a provider can be correctly identified.



55. (Original) The method of claim 54, wherein the estimation comprises an estimation based on a weighting of different provider information included in the claim.

56. (Original) The method of claim 27, wherein receiving information comprises receiving text of the context free grammar expression of the provisions.

57. (Original) The method of claim 56, further comprising parsing the received text of the context free grammar expression of the provisions.

58. (Original) The method of claim 57, further comprising generating information corresponding to a tree from the parsing.

59. (Original) The method of claim 27, wherein receiving information comprises receiving information produced by parsing the context free grammar expression of the provisions.

60. (Original) The method of claim 59, wherein receiving information comprises receiving information corresponding to a tree generated by parsing the context free grammar expression of the provisions.

61. (Original) The method of claim 27,  
further comprising storing information corresponding to a tree based on a parsing of the context free grammar, each provision represented by one or more tree nodes; and  
wherein determining whether a provision applies comprises traversing the tree to identify tree nodes corresponding to the claim.

63. (Original) The method of claim 61,

wherein at least some tree nodes include terminal values of the context free grammar;

wherein the information corresponding to the claim comprises information including a terminal value of the context free grammar, and

wherein traversing the tree to identify tree nodes corresponding to the claim correspond identifying a terminal value included in the tree and included in the information corresponding the claim.

64. (Original) The method of claim 63,

wherein traversing the tree comprises determining a sub-tree to traverse and indexing to the sub-tree.

65. (Original) The method of claim 64, wherein determining the sub-tree to traverse comprises determining a sub-tree corresponding to one of the following: an exclusions sub-tree, a limits sub-tree, a deductibles sub-tree, and a benefits sub-tree.

66. (Original) The method of claim 65, further comprising:

if a provision in the exclusions sub-tree applies to the claim, not traversing the limits sub-tree, the deductibles sub-tree, or the benefits sub-tree for the claim.

67. (Original) The method of claim 64, wherein determining the sub-tree to traverse comprises determining a benefit schedule that applies to the claim.

68. (Original) The method of claim 27, wherein information corresponding to the claim comprises one or more healthcare codes.

69. (Original) The method of claim 68, further comprising bundling a first set of more than one healthcare code into a second set having fewer healthcare codes than the first set.

70. (Original) The method of claim 68, further comprising replacing a healthcare code with a different healthcare code.

71. (Original) The method of claim 27, further comprising:  
    providing a user interface that receives user input corresponding to provisions;  
and  
    based on the received user input, generated the context free grammar expression of the provisions.

72. (Original) The method of claim 27, further comprising determining if the provisions conflict at design time.

73. (Original) The method of claim 72, wherein determining if the provisions conflict comprises determining if the provisions reference the same healthcare code.

74. – 91. (Cancelled)